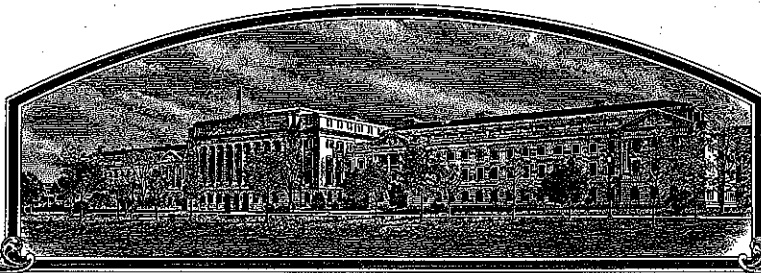


No.

200400279



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Pure-Seed Testing, Inc. and Rutgers,
the State University of New Jersey

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER, PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE FEE THEREON IS FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR SELLING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE FOREGOING PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BLUEGRASS, KENTUCKY

'Midnight II'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this fourteenth day of November, in the year two thousand and eight.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

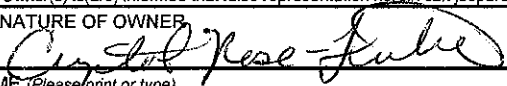
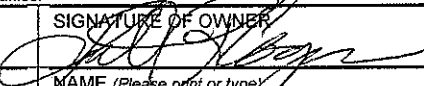
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and The Paperwork Reduction Act (PRA) of 1995.

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER Pure-Seed Testing, Inc. and Rutgers, the State University of New Jersey (date: 8/29/2008)		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME A98-739, PST-739	3. VARIETY NAME Midnight II
4. ADDRESS (Street and No., or RFD No., City, State, and ZIP Code, and Country) Pure Seed Testing, Inc. and New Jersey Agricultural Exp. Station at Rutgers University P.O. Box 449 Hubbard, OR 97032 New Brunswick, NJ 08901-8525		5. TELEPHONE (include area code) PST (503) 263-0719	FOR OFFICIAL USE ONLY PVPO NUMBER 200406279
6. FAX (include area code) PST (503) 263-0703		FILING DATE 7/27/04	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation	8. IF INCORPORATED, GIVE STATE OF INCORPORATION Oregon	9. DATE OF INCORPORATION 3 June 1974	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Crystal Rose-Fricker Pure-Seed Testing, Inc. P.O. Box 449 Hubbard, OR 97032			FILING AND EXAMINATION FEES: \$ 3652 - DATE 7/27/04 CERTIFICATION FEE: \$ 768.00 DATE 11/4/2008
11. TELEPHONE (include area code) (503) 651-2130	12. FAX (include area code) (503) 263-0703	13. E-MAIL crystalrf@turf-seed.com	
14. CROP KIND (Common Name) Kentucky bluegrass	16. FAMILY NAME (Botanical) Poaceae	18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.	
15. GENUS & SPECIES NAME OF CROP Poa pratensis	17. IS THE VARIETY A FIRST GENERATION HYBRID? Yes	20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes," answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no," go to item 23)	
19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)		21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input checked="" type="checkbox"/> FOUNDATION <input checked="" type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED	
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		22. DOES THE OWNER SPECIFY THAT THE CLASSES BE LIMITED AS TO NUMBER OF GENERATIONS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1, 2, 3, etc. FOR EACH CLASS. 6 FOUNDATION 7 REGISTERED 7 CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U.S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	
25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF OWNER 		SIGNATURE OF OWNER 	
NAME (Please print or type) Crystal Rose-Fricker		NAME (Please print or type) Keith Cooper, Ph.D.	
CAPACITY OR TITLE President, Pure Seed Testing, Inc.	DATE 7/7/04	CAPACITY OR TITLE Dean of Research, Rutgers University	DATE 6/26/04

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the Certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvp.htm>

#200400279

To avoid conflict with other variety names in use, the application must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 <http://www.ams.usda.gov/lsg/seed.htm>.

ITEM

- 19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified.
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

The first date of sale of Midnight II was 1 October 2003.

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the applicant/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotope, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Exhibit A**Origin and Breeding History of 'Midnight II' Kentucky Bluegrass**

Original and breeding history of PST-739 (A98-739) Kentucky bluegrass (*Poa pratensis* L.) appears to have originated as a single, apomictic plant selected from the progeny of a cross between Midnight Kentucky bluegrass (1) and a plant of A91-53 and aberrant derivative of Julia Kentucky bluegrass.

A plant of Midnight was pollinated by A91-53 an aberrant derivative of Julia during the late winter of 1995-1996 in a greenhouse located on the Cook College campus of Rutgers University. Environmental conditions prior to and during pollination were modified to increase sexual reproduction of facultatively apomictic Kentucky bluegrasses (2,3,4). Seed from the Midnight female parent was harvested in the spring of 1996. Seedlings were grown in the greenhouse in the winter of 1996-1997 and hybrids were phenotypically identified. Selected hybrid plants were established in a spaced-plant nursery at the Rutgers University Plant Science Research and Extension Farm at Adelphia, NJ, during the spring of 1997. The following summer, an attractive F₁ hybrid plant was selected and harvested with the designation 97-2006-5. This Kentucky bluegrass was selected for its medium maturity and average yielding traits compared to other Kentucky bluegrasses harvested from that nursery. In the fall of 1998, it was planted in a turf plot at Adelphia, New Jersey with the designation of A98-739. PST-739 has a low growth habit, above average turf quality, excellent leaf spot resistance, very little seed head formation in turf plots and below average winter color.

Fall 1999. A breeder seed nursery of Midnight II was established with 800 plants in Oregon.

Summer 2000. 760 plants were harvested to produce the first breeder seed of Midnight II.

Midnight II (PST-739, A98-739) has shown stability and uniformity multiplied for 8 years from Breeder seed through the Certified seed generation. Breeder seed is maintained by Pure Seed Testing, Inc. Seed propagation of Midnight II is limited to three generations of increase from Breeder seed—one each of Foundation, Registered and Certified. Off-types are removed from seed stock fields, but will continue to be expressed in each generation due to the facultative apomictic nature of Kentucky bluegrass. Many of these off-types are weak and will not survive in a seed production field. Less than 5%

of the population has been observed as off-types in the production fields of Midnight II. Midnight II and the parents of Midnight II have produced turf and seed production fields of good quality, acceptable uniformity and good stability. No variants have been observed in the replication or multiplication of Midnight II Kentucky bluegrass.

References

1. Meyer, W.A., B. Rose, J.M. Johnson-Cicalese and C.R. Funk. 1984. Registration of 'Midnight' Kentucky bluegrass. *Crop Sci.* 24(4).
2. Bashaw, E.C., and C.R. Funk. 1987. Apomictic grasses. P. 40-82. *In* F. Lemaire (ed.) *Proc. Int. Turfgrass Res. Conf., 5th, Avignon, France.* INRA Publ., Versailles.
3. Hintzen, J.J., and A.J.P. van Wijk. 1985. Ecotype breeding and hybridization in Kentucky bluegrass (*Poa pratensis* L.). p. 213-219. *In* F. Lemaire (ed.) *Proc. Int. Turfgrass Res. Conf., 5th, Avignon, France.* INRA Publ., Versailles.
4. Pepin, G.W., and C.R. Funk. 1971. Intraspecific hybridization as a method of breeding Kentucky bluegrass for turf. *Crop Sci.* 11:445-448.

Exhibit B - Revised

Statement of Distinctness for 'Midnight II' (A98-739) Kentucky Bluegrass

'Midnight II' is most similar to 'Midnight' Kentucky bluegrass. They differ in the following characteristics.

1. 'Midnight II' has a plant height at least 2.8 cm shorter than 'Midnight' (Tables 1 and 2).
2. 'Midnight II' has a flag leaf height at least 3 cm shorter than 'Midnight' (Tables 1 and 2).
3. 'Midnight II' has a flag leaf sheath length at least 1.4 cm shorter than 'Midnight' (Tables 1 and 2).
4. 'Midnight II' has a flag leaf width at least 0.5 cm shorter than 'Midnight' (Tables 1 and 2).
5. 'Midnight II' has a tiller sheath length at least 1.3 cm shorter than 'Midnight' (Tables 1 and 2).
6. The winter color of 'Midnight's' leaf blade is light purple but 'Midnight II's' is not green or purple.
7. The hairs on both sides just beneath the leaf sheaths blade (under collar) are present on 'Midnight' but absent on 'Midnight II'.
8. The hairs on the leaf sheaths ligule are short on 'Midnight II' but absent on 'Midnight'.
9. 'Midnight' has a keel on its leaf sheath but 'Midnight II' does not.
10. The lemma's basal webbing on the leaf sheath of 'Midnight II' is copious but it is scant on 'Midnight'.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY PROGRAM
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705**

**EXHIBIT C
(BLUEGRASS)**

**OBJECTIVE DESCRIPTION OF VARIETY
BLUEGRASS
(*Poa* spp.)**

NAME OF APPLICANT(S) Pure Seed Testing, Inc. and Rutgers, the State University of New Jersey	TEMPORARY DESIGNATION A98-739, PST-739	VARIETY NAME Midnight II
ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code) (b1: 8/29/2008) P.O. Box 449, Hubbard, OR 97032		FOR OFFICIAL USE ONLY PVPO NUMBER #200400279

Select the number which characterizes the variety in the features described below. For measured characteristics use leading zeros as necessary in order to fill all blanks (e.g. 089). Those characteristics marked with a star * are preferred to be recorded. Any others should be recorded to help establish novelty or uniqueness. Characteristics described, including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors; designate the system used:

Describe location of test area, conditions, and number of Plants used: **Pure Seed Testing Research Farm near Hubbard, OR. Sixty plants measured from P.V.P. nursery planted in a randomized complete block with three replications of 20 plants each.**

1. SPECIES:

1 = *Poa compressa* 2 = *P. pratensis* 3 = *P. trivialis* 4 = Others (Please Specify):

Chromosome Number

2. ADAPTATION: (0 = Not Tested, 1 = Not Adapted, 2= Adapted, 3 = Well Adapted)

Northeast Transitional Zone Southeast North Central
 Pacific N.W. Intermountain Southwest (CA, AZ) Other (Please Specify):

3. MATURITY (At first anthesis): Give test area near Hubbard, Oregon.

* 1 = Very Early 2 = Early (Delta, Mystic) 3 = Medium Early (Fylking, Nugget)
4 = Medium late (Newport, Adelphi, Aquila) 5 = Late (Merion, Baron, Enmundi)
6 = Very Late (Pacific)

Date of First Anthesis: May 30, 2001

<input type="text"/> <input type="text"/>	Number of days earlier than	* <input type="text"/>	}	1 = Nugget	2 = Frylking	3 = Delta
	Maturity same as	* <input type="text" value="10"/>		4 = Merion	5 = Newport	6 = Baron
<input type="text"/> <input type="text"/>	Number of days later than	* <input type="text"/>		7 = Mystic	8 = Sabre	9 = Reubens
				10 = Midnight		

4. PLANT HEIGHT (At maturity-Average of longest shoot of 10 plants from soil surface to top of panicle): Test Area Hubbard, OR

★

1 = Short

3 = Medium tall (Merion, Adelphi)

2 = Medium short (Baron, Fylking, Mystic)

4 = Tall (delta)

5 = Very tall

★ cm Height

cm Shorter than

Height same as

cm Taller than

★

★

★

#200400279

1 = Nugget

2 = Frylking

3 = Delta

4 = Merion

5 = Newport

6 = Baron

7 = Mystic

8 = Sabre

9 = Reubens

10 = Midnight

5. GROWTH HABIT:

★

Habit: 1 = Prostrate (Nugget)

2 = Semiprostrate (Merion)

3 = Erect (Delta)

cm Amount of spread by rhizomes in 1 year (give test area: _____)

6. LEAF BLADE:

★

Green color:

1 = Light green (Mystic)

3 = Moderately dk. green (Merion, Adelphi)

2 = Medium green (Fylking, Bonnieblue)

4 = Very dk. green (Nugget, Glade, Enmundi)

★

Bluegreen color:

1 = Not bluegreen (Mystic, Touchdown, Parade)

3 = Bluegreen (Nugget, Enmundi, Adelphi)

2 = Moderately bluegreen (Merion, A-34)

4 = Strongly bluegreen (Majestic)

Winter color:

1 = Light green

2 = Dark green

3 = Light purple

4 = Dark purple

5 = Not purple

6 = Not green or purple

★

Hairs upper side:

1 = Absent (Nugget)

2 = Sparse (Merion)

3 = Dense (Park)

Hairs lower side:

1 = Absent (Fylking, Merion)

2 = Sparse

3 = Dense (Nugget)

Luster upper side:

1 = Shiny (Eclipse, Enmundi)

2 = Dull (Aquila, Parade)

Luster lower side:

1 = Shiny (Mystic, Enmundi)

2 = Dull (Barbie, Eclipse)

★

Margin hairs

1 = Absent (Delta)

2 = Present (Fylking, Merion)

(Fringe on Margin or Base):

★

Width:

1 = Very fine (Mystic)

2 = Fine (Nugget)

3 = Medium (Merion, Fylking)

4 = Broad (Adelphi, Baron)

5 = Very broad (Monopoly)

mm Width (tiller leaf)

mm Narrower than

Width same as

mm Wider than

★

★

★

1 = Nugget

2 = Frylking

3 = Delta

4 = Merion

5 = Newport

6 = Baron

7 = Mystic

8 = Sabre

9 = Reubens

10 = Midnight

mm Length (tiller leaf)

mm Shorter than

Length same as

mm Longer than

★

★

★

1 = Nugget

2 = Frylking

3 = Delta

4 = Merion

5 = Newport

6 = Baron

7 = Mystic

8 = Sabre

9 = Reubens

10 = Midnight

Position of flag leaf (angle to stem): 1 = Appressed 2 = Open angle, yet stiff 3 = Nodding

7. LEAF SHEATH:

mm sheath length

#200400279

- ★ Seedling Color (base of sheath): 1 = Green (Nugget, Merion) 2 = Red (Delta)
- ★ Hairs on Margin: 1 = Absent (Fylking) 2 = Present (Nugget)
- ★ Margin Roughness (to touch): 1 = Smooth (Delta) 2 = Rough (Sabre)
- Hairs on Surface: 1 = Absent () 2 = Present (Nugget)
- Surface Roughness (to touch): 1 = Smooth (Fylking) 2 = Rough (Ram I)
- Hairs on both sides just beneath leaf blade (under collar): 1 = Absent (Merion) 2 = Present (Nugget)
- ★ Hairs on ligule: 1 = Absent (Fylking) 2 = Short (Baron) 3 = Long (Nugget)
- Glaucosity: 1 = Absent (Mystic, Enmundi) 2 = Present (Birka)
- Keel: 1 = Absent (Ram I) 2 = Present (Adelphi)

8. PANICLE (Mature Plant):

mm Length (Lowest branch whorl to top, for 10 plants) Test Area:

<input type="text"/>	<input type="text"/>	<input type="text"/>	mm Shorter than	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p>★ <input type="text" value="10"/></p> </div> <div style="font-size: 3em;">}</div> </div>	1 = Nugget	2 = Fylking	3 = Delta
<input type="text"/>	<input type="text"/>	<input type="text"/>	Panicle same as		4 = Merion	5 = Newport	6 = Baron
<input type="text"/>	<input type="text"/>	<input type="text"/>	mm Longer than		7 = Mystic	8 = Sabre	9 = Reubens
					10 = Midnight		

- ★ Color (at 50% flowering): 1 = Not red (Fylking) 2 = Red (Nugget)
- Shape of Rachis (opposite lower side branches): 1 = No bend (Nugget) 2 = Bend (Merion)
- ★ Collar: 1 = Opened (Nugget) 2 = Closed (Merion)
- ★ Branches Attitude (Lowest whorl): 1 = Drooping (America, Prato) 2 = Horizontal (Merion) 3 = Ascending (Tundra)
- Number of main branches in lowest whorl:
- ★ Panicle habit: 1 = Nodding (Newport) 2 = Upright (Nugget)
- ★ Panicle type: 1 = Open 2 = Intermediate 3 = Compact
- Anther color (anthesis): 1 = Purple 2 = Yellow 3 = Brown

9. LEMMA

- ★ Keel
- ★ Marginal Nerves { 1 = Glabrous 2 = Slightly pubescent 3 = Pubescent
- Intermediate Nerves: 1 = Distinct 2 = Obscure
- Basal Webbing: 1 = Absent 2 = Scant (Baron) 3 = Copious (Merion)

10. SEED: (Floret-not dehulled)

#200400279

★ Apomixis Percentage: 1 = more than 95 2 = 85 to 95 3 = less than 85 Phenol Reaction: 1 = none-lemma removed (Merion) 2 = Beige (Cougar) 3 = Brown (Windsor)
4 = Black (Mystic -2hrs) 5 = Black (-24hrs) mm Width (average of 10) mm Length Milligrams per 10,000 seed Milligrams less than

Weight same as

Milligrams more than

★ ★ ★

1 = Nugget 2 = Frylking 3 = Delta

4 = Merion 5 = Newport 6 = Baron

7 = Mystic 8 = Sabre 9 = Reubens

 Weight Class (g per 10,000 seed): 1 = Light (< 3g Sydsport, Merion)
2 = Medium (3g - 4g Adelphi, Parade)
3 = Heavy (> 4g Fylking, Nugget)

11. ENVIRONMENTAL RESISTANCE:

(0 = Not Tested; 1 = Very Susceptible, 2 = Moderately Susceptible, 3 = Moderately Resistant, 4 = Highly Resistant)

★ Cool Temperature (Winter color) Cold (injury) Heat Drought
 Shade Low Fertility Acid Soil (< pH 5.5) Alkalinity (pH > 7.5)
 Salinity Soil Compaction Poor Drainage Air Pollution
 Other (Please Specify):

12. DISEASE RESISTANCE:

(0 = Not Tested; 1 = Very Susceptible, 2 = Moderately Susceptible, 3 = Moderately Resistant, 4 = Highly Resistant)

 Melting-Out *Drechslera poae* (*Helminthosporium vagans*) Sclerotinia *S. borealis*
 Helminthosporium Leaf Spot *Bipolaris sorokiniana* Stem Rust *Puccinia graminis*
 Brown Patch *Rhizoctonia solani* Stripe Rust *P. striiformis*
 Powdery Mildew *Erysiphe graminis* Leaf Rust *P. poae-nemoralis*
 Stripe Smut *Ustilago striiformis* Orange Stripe Rust *P. poarum*
 Flag Smut *Urocystis agropyri* Pythium Blight *Pythium* spp.
 Pink Snow Mold *Fusarium nivale* Red Thread *Corticium fujiciforme*
 Ergot *Claviceps purpurea* Other (Please Specify):
 Fusarium Blight *Fusarium roseum*, *F. tricinctum* Other (Please Specify):
 Typhula Blight *Typhula* spp.
 Dollar Spot *Sclerotinia homoeocarpa*

13. INSECTS, NEMATODES, RESISTANCE:
(0 = Not Tested; 1 = Very Susceptible, 2 = Moderately Susceptible, 3 = Moderately Resistant, 4 = Highly Resistant)

0	Chinch Bug <i>Blissus</i> spp. (give species:)
3	Sod Webworm <i>Crambus</i> spp. (give species:)
3	Bluegrass Billbug <i>Sphenophorus parvulus</i>
0	White Grub: Japanese Beetle, Chafer (give species)
0	Greenbug Aphid <i>Schizaphis graminum</i>
0	Other (Please Specify):
0	Other (Please Specify):

14. Give variety or varieties that most closely resemble the application variety. For the following characteristics indicate Degree of Resemblance by placing in the column marked D.R., one of the following numbers: 1 = Application variety is less than comparison variety; 2 = Same as; 3 = More than, better, greater, darker, more disease resistant, etc.

CHARACTER	VARIETY	D.R.	CHARACTER	VARIETY	D.R.
Maturity-heading	Midnight	2	Leaf Width	Midnight	1
Height	Midnight	1	Leaf Color Spring	Midnight	2
Seed Size	Midnight	1	Leaf Color Summer	Midnight	2
Seed Weight	Midnight	1	Leaf Color Winter	Midnight	2
Cold Injury	Midnight	2	Drought	Midnight	2
Heat	Midnight	2	Disease**	Midnight	2
Shade	Midnight	2			

**Specify each disease evaluated.

15. ADDITIONAL DESCRIPTION

Describe all characteristics and conditions that cannot be adequately described in this form in Exhibit D.

Exhibit D**Additional Description of 'Midnight II' Kentucky Bluegrass**

1. 'Midnight II' has exhibited excellent turf quality in the 2000 NTEP trials (Table 4).
2. 'Midnight II' has exhibited good establishment (Tables 5 and 6).
3. 'Midnight II' has exhibited a dark genetic color (Table 5).
4. 'Midnight II' has less stemminess in the spring (Table 6).

Table 1. 2003 mean morphological measurements for entries in a Kentucky bluegrass seed yield trial seeded fall of 2001 near Hubbard, OR.

Entry	Plant Height (cm)	Flag Leaf Height (cm)	Flag Leaf Sheath Length (cm)	Tiller Leaf Sheath Length (cm)	Flag Leaf Length (cm)
Midnight	48.0	27.4	10.0	9.9	5.1
Midnight II	45.2	24.4	8.6	6.4	4.3
LSD (0.05)	2.7	2.5	0.7	0.8	0.5

Table 2. 2003 mean morphological measurements for entries in a Kentucky bluegrass seed yield trial seeded fall of 2002 near Hubbard, OR.

Entry	Plant Height (cm)	Top Flag Leaf		Tiller Leaf		Flag Leaf to Panicle		Branches/ Lowest Whorl		Tiller Leaf		Flag Leaf		Tiller Count (#/100 cm ²)
		Height (cm)	Sheath Length (cm)	Sheath Length (cm)	Length (cm)	Top (cm)	Length (cm)	Length (cm)	(#)	Length (cm)	Width (mm)	Length (cm)	Width (mm)	
H97-762	100.7	66.4	16.0	7.0	14.4	37.1	13.6	4.0	4.0	13.6	3.0	10.3	3.0	28.6
109-803	96.3	52.4	17.5	13.4	13.5	42.1	14.0	4.4	4.4	14.0	3.2	9.8	3.0	49.6
Voyager	85.6	46.4	13.9	5.6	13.2	34.9	14.4	4.1	4.1	14.4	2.8	8.0	2.7	41.3
H99-129	81.6	46.1	12.3	8.5	10.8	33.2	10.5	4.2	4.2	10.5	3.0	6.0	2.4	23.3
Wabash	78.2	39.6	16.4	13.9	13.7	39.9	15.9	4.6	4.6	15.9	3.7	10.1	3.5	38.8
A99LM-15	76.4	39.1	21.3	10.4	12.1	30.0	10.0	4.6	4.6	10.0	4.8	7.9	3.9	65.5
PP-23651	75.9	44.6	11.8	7.4	11.1	28.0	11.2	4.2	4.2	11.2	2.3	6.7	2.2	26.1
Dragon	68.8	31.8	11.0	9.3	10.4	31.7	11.7	4.7	4.7	11.7	3.9	7.5	3.2	49.4
Cabernet	64.5	28.5	12.0	8.7	10.5	33.6	9.0	4.4	4.4	9.0	3.5	4.9	3.3	47.9
108-79	62.3	28.3	8.1	6.2	5.4	26.4	6.3	4.0	4.0	6.3	1.9	4.3	1.9	48.9
109-1114	61.3	21.2	8.8	4.5	7.5	31.9	7.5	4.6	4.6	7.5	2.8	5.4	2.6	57.8
Nugget	60.1	32.7	11.1	5.8	10.9	26.8	10.5	4.1	4.1	10.5	3.2	6.9	3.1	24.4
PST-1804	59.9	29.0	9.5	6.6	8.5	29.0	7.9	3.6	3.6	7.9	2.9	5.2	2.2	55.9
Shamrock	56.8	27.7	9.2	7.1	8.9	26.3	8.6	4.0	4.0	8.6	3.1	5.5	2.6	38.8
109-1060	55.8	18.8	9.9	4.5	7.7	31.9	7.1	4.4	4.4	7.1	2.6	5.1	2.3	60.8
Y2K-30	55.0	23.1	10.0	6.7	9.1	26.0	8.9	4.2	4.2	8.9	4.8	6.0	4.4	38.0
Royce	54.4	21.5	9.3	4.5	8.8	27.8	8.2	4.0	4.0	8.2	2.3	5.5	2.3	53.4
B5-114	50.7	19.2	8.4	4.8	7.1	25.3	7.0	3.8	3.8	7.0	2.1	4.8	2.0	33.8
Unique	50.0	19.9	8.9	3.8	8.7	27.0	7.8	4.1	4.1	7.8	2.8	4.6	2.5	54.8
Y2K-31	50.0	21.2	9.2	5.0	7.4	25.6	7.8	3.8	3.8	7.8	2.0	4.8	1.6	49.6
Y2K-136	49.6	20.3	9.6	7.5	7.2	25.4	7.2	3.5	3.5	7.2	4.3	4.6	3.6	43.8
Y2K-59	49.5	19.4	9.6	4.6	6.8	28.7	6.2	3.9	3.9	6.2	3.6	4.3	3.3	32.8
Brilliant	49.0	22.3	8.4	6.7	7.6	24.4	7.2	4.0	4.0	7.2	2.9	4.4	2.7	50.1
B3-170	48.9	21.5	9.1	5.7	7.9	25.8	7.2	3.7	3.7	7.2	3.1	5.2	3.0	54.0
Voyager II	48.8	20.9	8.4	5.6	7.5	24.2	7.2	3.5	3.5	7.2	3.1	4.5	2.4	55.8
B3-171	47.6	20.2	8.0	5.5	7.2	24.3	6.2	3.5	3.5	6.2	2.9	4.0	2.6	44.8
Bluemax	47.5	19.7	9.3	6.3	7.9	27.0	8.3	3.7	3.7	8.3	3.8	4.1	3.5	30.9
Bluestar	44.5	17.6	9.0	4.7	7.0	22.0	7.0	4.4	4.4	7.0	3.3	4.8	2.6	77.8
Midnight	41.2	20.5	8.9	7.5	7.0	16.8	9.0	4.4	4.4	9.0	3.0	4.8	2.4	29.8
Y2K-117	41.1	18.7	8.0	5.5	6.3	21.2	6.3	3.1	3.1	6.3	2.6	4.0	1.9	45.4
109-1121	40.6	9.0	6.7	3.5	6.3	21.1	6.7	3.7	3.7	6.7	1.9	4.6	1.9	79.3
Y2K-27	40.5	17.3	8.4	5.6	7.4	22.7	7.2	3.4	3.4	7.2	2.7	4.5	2.7	47.3
Y2K-138	39.6	18.4	8.3	5.2	7.1	20.4	6.3	3.2	3.2	6.3	4.7	4.2	3.6	19.8
Y2K-75	38.0	14.8	7.5	6.3	6.4	20.6	6.2	3.8	3.8	6.2	2.6	3.8	2.3	72.0
Y2K-169	33.9	13.9	6.8	4.4	5.1	20.2	5.5	3.1	3.1	5.5	3.1	3.7	2.7	36.3
Midnight II	30.6	16.2	7.4	6.2	6.0	15.0	7.1	3.9	3.9	7.1	2.9	3.8	2.2	25.5
North Star	28.6	8.3	4.9	1.6	4.4	16.0	5.2	3.3	3.3	5.2	2.2	3.9	2.3	52.3

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Table 3. Mean initial heading dates for entries in a 4-row Kentucky bluegrass seed yield trial seeded fall of 2001 near Hubbard, OR.

Entry	2002	2003
Midnight II	13 May	18 May
Midnight	14 May	17 May
LSD (0.05)	3 days	5 days

TABLE 4.

SUMMARY OF TURFGRASS QUALITY RATINGS FOR KENTUCKY BLUEGRASS CULTIVARS
IN THE 2000 NATIONAL KENTUCKY BLUEGRASS TEST */
2001 DATA
TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF **/

NAME	ALL LOCATIONS			STATISTICS FOR ALL LOCATIONS					MAXIMUM IN TOP 25% 7/
	MEAN 1/	RANK 2/	SUM OF RANKS 3/	HIGHEST RANK 4/	LOWEST RANK 5/	RANK 6/			
1B7-308	5.7	82	2621	103	12	155			24.1
99AN-53	5.0	169	4101	171	38	173			3.4
A96-427	5.7	86	2433	79	21	162			20.7
A96-451	5.7	106	2667	109	8	167			24.1
A96-739	5.7	111	2903	127	5	161			10.3
A96-742	5.2	160	3768	163	12	170			3.4
A97-1330	5.9	43	1971	43	5	138			13.8
A97-1409	5.7	105	2681	110	3	173			17.2
A97-1432	6.0	27	1703	26	1	169			48.3
A97-1715	6.1	18	1591	23	2	132			44.8
A97-857	5.4	151	3407	153	55	166			0.0
A98-1028	5.6	122	2916	128	31	161			10.3
A98-139	5.3	154	3465	156	16	171			6.9
A98-183	5.6	133	2922	130	37	169			13.8
A98-365	5.8	62	2235	59	16	139			24.1
A98-407	5.3	158	3626	160	52	170			0.0
A98-881	5.6	123	2691	111	14	169			10.3
ABBEX	5.7	110	2599	100	6	161			17.2
ALLURE	5.7	100	2547	93	7	172			20.7
ALPINE	5.8	60	2228	57	3	167			31.0
APOLLO	6.0	34	1864	37	1	158			35.7
ARCADIA	6.2	9	1453	18	2	172			55.2
ARROW (A97-1567)	5.9	47	2098	47	10	158			34.5
ASCOT	5.7	107	2794	120	6	164			17.2
AWARD	6.2	6	1141	5	1	167			65.5
AWESOME (J-1420)	6.2	8	1173	7	3	107			58.6
B3-171	5.9	44	1969	42	4	169			31.0
B3-185	5.8	70	2433	79	5	168			20.7
B4-128A	5.7	91	2372	71	12	164			20.7
B5-144	5.6	130	2972	134	25	173			6.9
B5-43	5.6	134	3079	143	1	172			10.3
B5-45	5.6	126	2981	136	8	161			10.3
BA 00-6001	5.6	127	2995	138	36	169			6.9
BA 82-288	5.8	66	2284	62	9	154			24.1
BA 83-113	5.8	68	2392	73	8	163			24.1
BA 84-140	5.6	118	2722	114	3	171			20.7
BAR PP 0468	5.8	72	2477	85	2	172			20.7
BAR PP 0471	5.9	51	2188	53	14	162			10.3
BAR PP 0566	5.7	89	2505	89	8	165			20.7
BAR PP 0573	5.7	92	2595	98	20	167			17.2
BARIS	5.7	84	2510	91	21	171			24.1
BARITONE	5.4	148	3327	152	25	169			10.3
BARON	5.6	119	2660	107	10	169			17.2
BARONETTE (BA 81-058)	5.8	58	2252	60	7	157			31.0
BARONIE	5.6	115	2775	117	2	172			24.1
BARRISTER (J-1655)	6.2	10	1342	11	2	145			58.6
BARTITA	5.5	138	3058	142	28	172			10.3

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TABLE 4.
(CONT'D)

SUMMARY OF TURFGRASS QUALITY RATINGS FOR KENTUCKY BLUEGRASS CULTIVARS
IN THE 2000 NATIONAL KENTUCKY BLUEGRASS TEST
2001 DATA
TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

NAME	ALL LOCATIONS		SUM OF RANKS 3/	STATISTICS FOR ALL LOCATIONS						MAXIMUM IN TOP 25% 7/
	MEAN 1/	RANK 2/		RANK 4/	HIGHEST RANK 5/	LOWEST RANK 6/				
BARZAN	5.0	164	3986	168	32	173	3.4			
BEDAZZLED	6.1	17	1451	17	2	140	51.7			
BEYOND (J-1880)	6.0	30	1821	33	5	169	44.8			
BH 00-6002	5.5	141	3105	144	2	168	6.9			
BH 00-6003	5.0	167	3962	167	58	173	0.0			
BLACKSBURG II (PST-18MY)	5.7	90	2580	96	4	153	13.8			
BLACKSTONE	6.0	28	1737	29	2	154	44.8			
BLUE KNIGHT	5.3	159	3461	155	12	173	3.4			
BLUE RIDGE (A97-1449)	5.7	94	2643	105	14	165	17.2			
BLUEMAX (PST-B5-89)	5.9	52	2234	58	5	161	27.6			
BLUESTONE (PST-731)	6.2	12	1375	14	2	148	62.1			
BODACIOUS	4.9	170	3948	166	14	173	3.4			
BOOMERANG	5.3	155	3304	149	6	168	17.2			
BORDEAUX	5.7	112	2701	112	24	165	13.8			
BOUTIQUE	5.7	99	2468	84	8	171	17.2			
BRILLIANT	6.0	31	1803	32	4	172	37.9			
BROOKLAWN	5.6	132	2998	140	52	170	0.0			
CABERNET	5.7	98	2598	99	25	154	20.7			
CHAMPAGNE	5.6	124	2836	123	10	168	17.2			
CHAMPLAIN (A98-1275)	5.8	59	2319	64	7	171	27.6			
CHATEAU	5.6	120	2804	122	21	166	17.2			
CHELSEA	5.5	143	2993	137	3	168	17.2			
CHICAGO II	5.8	57	2369	70	1	165	27.6			
COVENTRY	5.8	61	2213	56	5	154	20.7			
CVB-20631	4.9	172	4272	173	65	173	0.0			
DLF 76-9032	5.5	145	3202	146	6	173	13.8			
DLF 76-9034	5.0	166	3832	165	10	172	6.9			
DLF 76-9036	5.6	117	2888	125	33	164	6.9			
DLF 76-9037	5.9	45	2190	54	5	157	27.6			
EAGLETON	5.7	85	2436	81	9	162	27.6			
ENVICTA	5.4	152	3310	151	17	168	10.3			
EVEREST	5.8	53	2173	52	4	161	24.1			
EVERGLADE	6.0	32	1748	30	3	162	48.3			
EXCURSION (J-1648)	6.0	36	1830	34	3	163	31.0			
FAIRFAX	5.7	81	2482	87	4	169	27.6			
FREEDOM II	6.1	23	1513	20	1	161	44.8			
GINNEY (J-1368)	6.1	22	1711	27	1	153	41.4			
GLENMONT (H94-293)	5.9	46	2148	49	14	146	27.6			
GO-9LM9	4.7	173	4186	172	23	173	6.9			
GOLDRUSH	5.7	97	2564	95	7	160	20.7			
GOLDSTAR (A98-296)	5.7	88	2593	97	11	164	6.9			
H92-203	5.8	63	2335	67	25	154	13.8			
H92-558	5.7	104	2623	104	14	161	13.8			
HALLMARK	5.8	67	2279	61	10	139	20.7			
HV 140	5.7	102	2564	95	8	157	27.6			
HV 238	5.8	64	2398	74	9	154	13.8			
IMPACT	6.3	3	1144	6	1	139	62.1			

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TABLE 4.
(CONT'D)

SUMMARY OF TURFGRASS QUALITY RATINGS FOR KENTUCKY BLUEGRASS CULTIVARS
IN THE 2000 NATIONAL KENTUCKY BLUEGRASS TEST

2001 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

NAME	ALL LOCATIONS		SUM OF RANKS 3/ RANKS 3/	STATISTICS FOR ALL LOCATIONS			MAXIMUM IN TOP 25% 7/ IN TOP 25% 7/
	MEAN 1/ MEAN 1/	RANK 2/ RANK 2/		HIGHEST RANK 5/ RANK 5/	LOWEST RANK 6/ RANK 6/		
J-1513	6.2	7	1226	8	3	129	55.2
J-1838	6.1	20	1440	16	3	144	58.6
J-2561	5.9	41	1936	40	2	169	48.3
J-2885	5.8	71	2410	77	25	139	13.8
J-2890	6.1	21	1472	19	1	154	51.7
JEFFERSON	5.7	83	2348	69	3	162	20.7
JEWEL	5.1	163	3610	159	35	173	6.9
JULIA	5.6	135	2958	131	4	167	10.3
JULIUS	5.5	147	2973	135	11	173	17.2
KENBLUE	5.0	168	3812	164	14	173	6.9
LAKESHORE (A93-200)	5.6	114	2752	115	26	167	10.3
LANGARA	6.1	19	1421	15	1	157	55.2
LIBERATOR	6.0	37	1984	44	7	155	34.5
LILY	5.6	125	2919	129	4	170	24.1
LIMERICK	5.5	139	2900	126	1	166	10.3
LIMOUSINE	5.7	113	2648	106	3	162	17.2
MALLARD (A97-1439)	6.0	35	1898	38	8	170	34.5
MARKHAM (NA-K991)	5.4	153	3417	154	3	173	6.9
MARQUIS	5.6	136	2996	139	22	170	13.8
MERCURY (PICK-232)	5.9	50	2156	50	5	171	24.1
MIDNIGHT	6.2	13	1365	13	1	122	48.3
MIDNIGHT II (A98-739)	6.3	1	996	1	1	154	72.4
MISTY	5.6	131	2881	124	25	167	3.4
MONTE CARLO (A96-402)	5.7	101	2438	82	15	157	24.1
MOON SHADOW (PICK 113-3)	6.3	2	1023	2	1	106	62.1
MOONLIGHT	6.1	25	1836	36	1	172	41.4
NA-K992	4.9	171	4080	170	71	173	0.0
NORTH STAR	5.5	140	2960	132	9	167	13.8
NU DESTINY (J-2695)	6.3	4	1140	4	1	131	65.5
NUGLADE	6.0	33	1671	24	9	151	51.7
ODYSSEY	6.1	16	1536	21	5	148	51.7
PERFECTION (J-1515)	6.2	5	1073	3	2	107	69.0
PICK 417	5.8	69	2323	65	16	164	17.2
PICK 453	5.8	79	2384	72	19	151	17.2
PP H 6366	5.6	129	2665	108	11	170	20.7
PP H 6370	5.8	78	2493	88	4	158	20.7
PP H 7832	5.5	146	3284	148	28	169	3.4
PP H 7907	5.3	156	3556	157	20	172	6.9
PP H 7929	5.0	165	4079	169	89	173	0.0
PRINCETON 105	6.0	39	1785	31	4	147	35.7
PRO SEEDS - 453	5.9	42	1831	35	6	138	35.7
PST-108-79	5.5	142	2999	141	11	167	6.9
PST-161	5.8	76	2346	68	16	155	20.7
PST-1701	6.0	26	1728	28	1	144	41.4
PST-1804	5.7	109	2777	118	6	152	20.7
PST-222	5.7	93	2524	92	35	153	6.9
PST-604	5.4	149	3305	150	18	171	13.8

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TABLE 4.
(CONT'D)
SUMMARY OF TURFGRASS QUALITY RATINGS FOR KENTUCKY BLUEGRASS CULTIVARS
IN THE 2000 NATIONAL KENTUCKY BLUEGRASS TEST
2001 DATA
TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

NAME	ALL LOCATIONS		SUM OF RANKS 3/	STATISTICS FOR ALL LOCATIONS					MAXIMUM IN TOP 25% 7/
	MEAN 1/ RANK 2/	RANK 3/		HIGHEST RANK 4/	LOWEST RANK 5/	RANK 6/			
PST-B3-170	5.7	95	2507	90	8	163	10.3		
PST-B4-246	5.6	137	2968	133	27	169	10.3		
PST-B5-125	5.8	73	2399	75	18	168	17.2		
PST-H5-35	5.5	144	3232	147	24	170	6.9		
PST-H6-150	5.8	74	2435	80	17	158	20.7		
PST-YORK HARBOR 4	5.6	116	2779	119	22	168	10.3		
QUANTUM LEAP	6.1	24	1553	22	7	139	48.3		
RAMBO	5.7	87	2301	63	9	171	24.1		
RAVEN	5.6	121	2774	116	7	168	17.2		
RITA	5.9	49	2082	46	5	142	24.1		
ROYALE (A97-1336)	5.8	54	2116	48	8	168	31.0		
ROYCE (A98-304)	5.9	40	1960	41	14	158	44.8		
RUGBY II	6.0	38	1899	39	2	169	37.9		
SERENE	5.9	48	2031	45	4	150	24.1		
SHAMROCK	5.6	128	2795	121	2	173	6.9		
SHOWCASE	5.7	80	2478	86	14	154	20.7		
SI A96-386	5.7	108	2703	113	13	164	10.3		
SONOMA	5.7	103	2620	101	10	161	13.8		
SR 2284 (SRX 2284)	5.8	55	2157	51	7	150	31.0		
SRX 2114	5.7	96	2621	103	3	150	17.2		
SRX 2394	5.8	75	2329	66	5	167	27.6		
SRX 26351	5.8	65	2409	76	2	161	27.6		
SRX 27921	5.4	150	3167	145	19	173	17.2		
SRX QG245	5.1	162	3683	161	7	173	10.3		
TOTAL ECLIPSE	6.1	15	1334	10	1	160	51.7		
TSUNAMI (J-2487)	6.2	14	1350	12	4	140	55.2		
UNIQUE	6.0	29	1687	25	4	162	44.8		
UNKNOWN	6.2	11	1285	9	1	152	65.5		
VOYAGER II (PST-1QG-27)	5.8	56	2198	55	13	161	17.2		
WASHINGTON	5.3	157	3586	158	22	169	3.4		
WELLINGTON	5.1	161	3719	162	23	170	6.9		
WILDWOOD	5.8	77	2465	83	1	165	20.7		
LSD VALUE	0.2								
C.V. (%)	9.6								

*// TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

**// C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

1// MEAN - AN AVERAGE OF ALL THE TURFGRASS QUALITY RATINGS FROM ALL LOCATIONS.

2// RANK - RANKING OF THE MEAN OF ALL QUALITY RATINGS.

3// SUM OF RANKS - A SUM OF ALL THE RANKINGS FROM THE VARIOUS LOCATIONS.

4// RANK - THE RANKING OF THE SUM OF RANKS.

5// HIGHEST RANK - THE HIGHEST RANKING ACHIEVED BY THAT ENTRY AT ANY ONE LOCATION.

6// LOWEST RANK - THE LOWEST RANKING ACHIEVED BY THAT ENTRY AT ANY ONE LOCATION.

7// MAXIMUM IN TOP 25% - THE PERCENTAGE OF LOCATIONS WHERE THAT ENTRY FINISHED IN THE TOP 25% OF ALL ENTRIES.

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Table 5. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded August 2000 at North Brunswick, NJ (includes entries in 2000 National test).

	Cultivar or Selection	Turf Quality ¹ 2001 Avg.	Establishment ² Sept. 2001	Green-up ³ April 2001	2002-Tolerance ⁴ July 2001	Density ⁵ Sept. 2001	Genetic Color ⁶ Sept. 2001	Leaf Texture ⁷ Nov. 2001	Winter Color ⁸ Jan. 2002
1	Moonlight	7.1	6.7	3.3	8.3	5.7	7.7	3.3	5.0
10	Midnight	6.5	5.6	1.7	6.0	7.0	7.0	5.7	6.3
14	Midnight II	6.3	6.1	1.7	5.3	7.0	7.3	5.7	6.3
100	Baron	5.4	5.3	2.7	7.0	6.3	4.7	4.7	4.3
183	NA-K992	3.5	5.3	2.3	3.7	3.7	5.7	5.0	3.0
	LSD (0.05)	0.7	1.0	1.5	1.6	1.5	1.2	1.3	1.2

¹g = best turf quality²g = quickest establishment (Many entries with slow establishment were established with new crop seed showing varying degrees of after-ripening dormancy; see text.)³g = earliest spring green-up⁴g = best heat tolerance⁵g = highest shoot density⁶g = darkest green color⁷g = finest leaf texture⁸g = brightest green color during winter

Table 6. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded August 2000 at Adelphia, NJ (includes entries in 2000 National test).

	Cultivar or Selection	Turf Quality ¹ 2001 Avg.	Establishment ² Sept. 2000	Height ³ Oct. 2000	Color ⁴ Nov. 2000	Winter Color ⁵ March 2001	Steminess ⁶ May 2001
1	SRX 26351	6.8	6.3	6.3	5.0	5.3	5.3
13	Midnight	6.3	7.0	7.0	6.3	4.3	6.7
15	Midnight II	6.3	7.0	7.3	5.7	4.0	8.0
112	Baron	5.5	6.3	6.3	4.7	3.3	4.3
274	W 102A-K	2.1	5.3	7.0	4.7	1.3	6.7
	LSD (0.05)	0.8	1.4	1.1	1.3	1.3	1.0

¹g = best turf quality²g = quickest establishment³g = shortest plant height⁴g = darkest green color⁵g = brightest green color during winter⁶g = fewest visible seed heads

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICEEXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) Pure-Seed Testing, Inc., and Rutgers, the State University of New Jersey (b1: 8/29/2008)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER PST-A98-739, PST-739	3. VARIETY NAME Midnight II
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) Pure Seed Testing, Inc. and New Jersey Agricultural Exp. Station at Rutgers University PO Box 449 Hubbard, OR 97032 New Brunswick, NJ 08901-8525	5. TELEPHONE (include area code) 503-263-0719	6. FAX (include area code) 503-263-0703
7. PVPO NUMBER #200400279		

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain. ☒ YES ☐ NO9. Is the applicant (individual or company) a U.S. national or U.S. based company? If no, give name of country. ☒ YES ☐ NO10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?

☐ YES ☐ NO If no, give name of country

b. If original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership. (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

The New Jersey Agricultural Experiment Station at Rutgers University is the original breeder of Midnight II. The NJAES has licensed this variety to Pure-Seed Testing, Inc. to purify, reselect and evaluate Midnight II Kentucky bluegrass. Midnight II is co-owned by Pure-Seed Testing, Inc. and Rutgers, the State University of New Jersey. Pure-Seed Testing, Inc. has licensed Midnight II to Turf-Seed, Inc., to grow, produce, and market the variety throughout the world.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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